

FIGURE 1
Existing and Proposed Conditions
Depth at 2.1 cfs (95% Exceedance)
Coppei Creek Project Area 07 30% Design
for Walla Walla County Conservation District





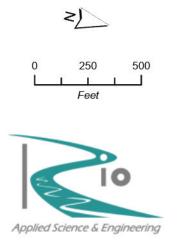


FIGURE 2
Existing and Proposed Conditions
Depth at 8.7 cfs (50% Exceedance)
Coppei Creek Project Area 07 30% Design
for Walla Walla County Conservation District





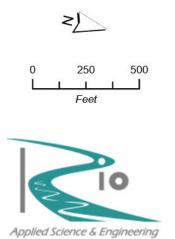


FIGURE 3
Existing and Proposed Conditions
Depth at 78.6 cfs (5% Exceedance)
Coppei Creek Project Area 07 30% Design
for Walla Walla County Conservation District





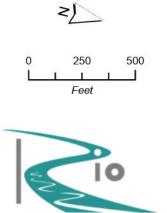


FIGURE 4
Existing and Proposed Conditions
Depth at 259 cfs (1.5-year Flow)
Coppei Creek Project Area 07 30% Design
for Walla Walla County Conservation District

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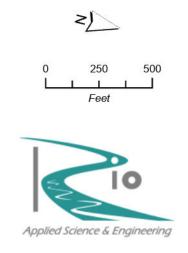


FIGURE 5
Existing and Proposed Conditions
Depth at 361 cfs (2-year Flow)
Coppei Creek Project Area 07 30% Design
for Walla Walla County Conservation District





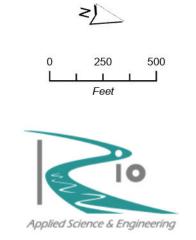


FIGURE 6
Existing and Proposed Conditions
Depth at 701 cfs (5-year Flow)
Coppei Creek Project Area 07 30% Design
for Walla Walla County Conservation District





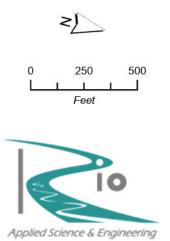
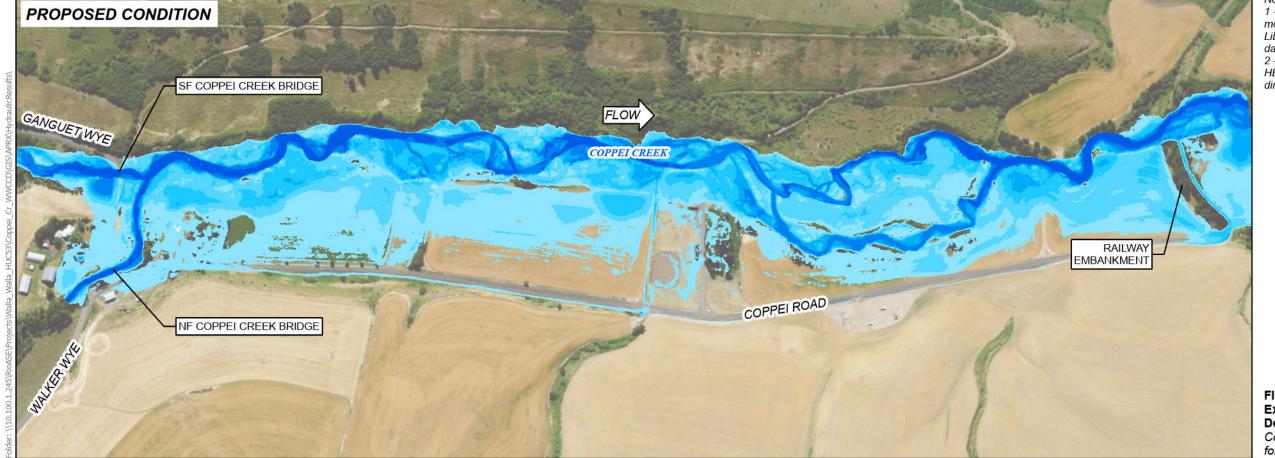


FIGURE 7
Existing and Proposed Conditions
Depth at 1,002 cfs (10-year Flow)
Coppei Creek Project Area 07 30% Design
for Walla Walla County Conservation District





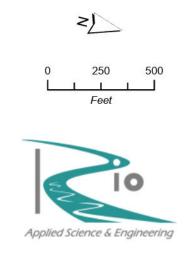
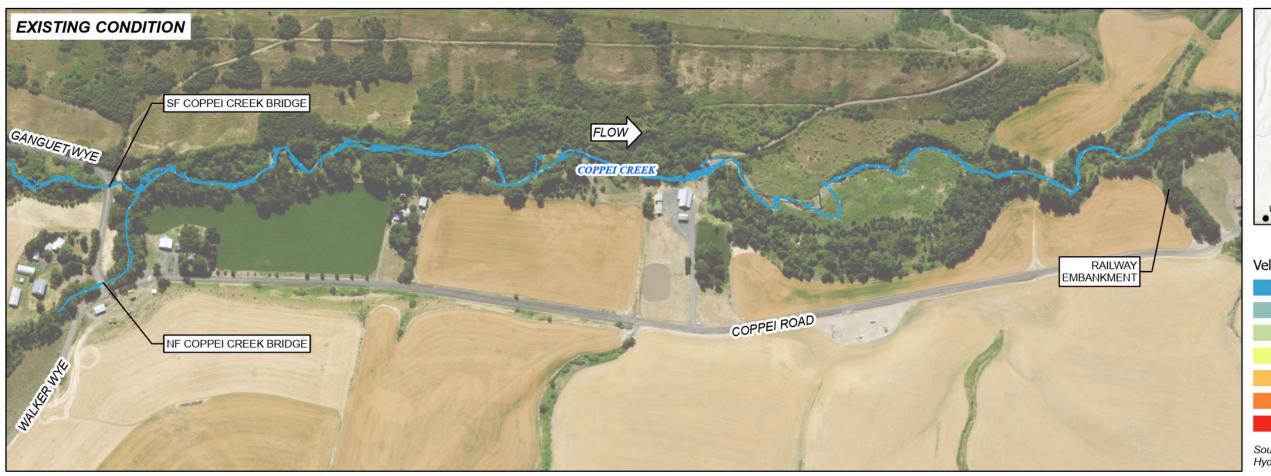
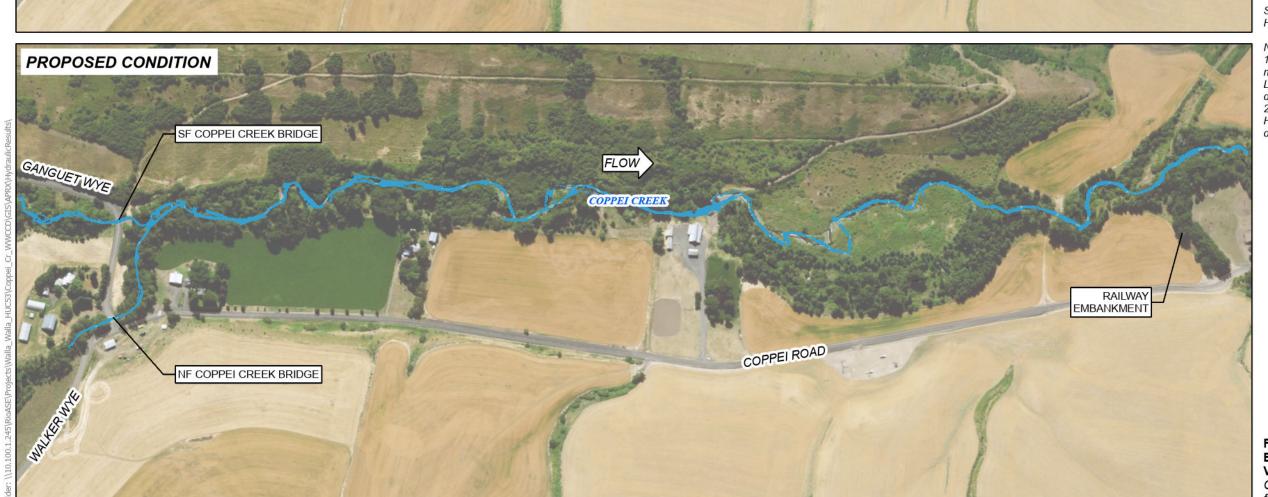
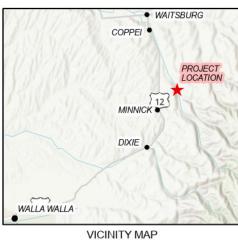
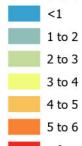


FIGURE 8
Existing and Proposed Conditions
Depth at 2,403 cfs (100-year Flow)
Coppei Creek Project Area 07 30% Design
for Walla Walla County Conservation District









Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

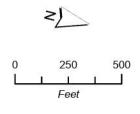
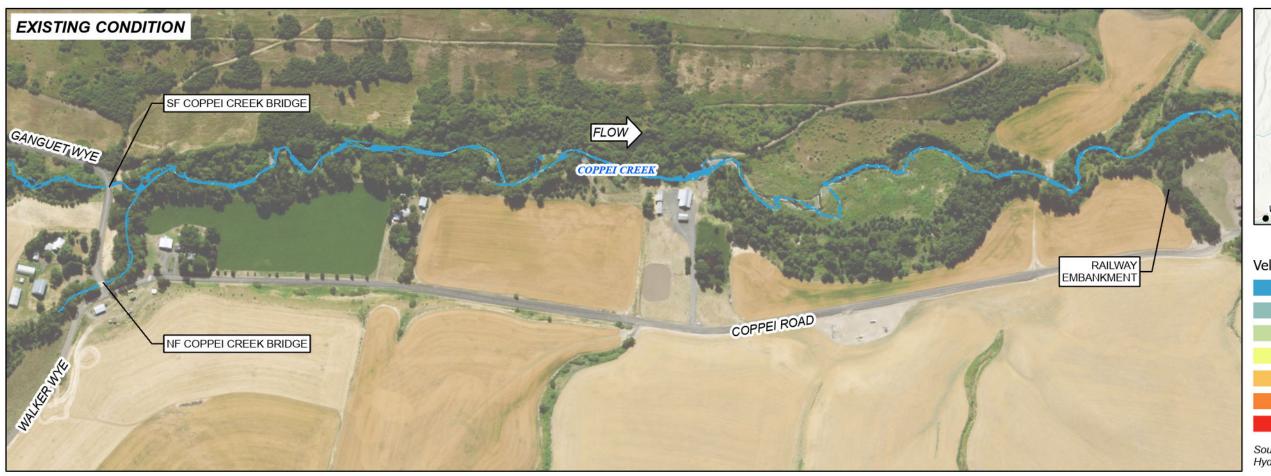


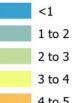


FIGURE 9 Existing and Proposed Conditions Velocity at 2.1 cfs (95% Exceedance) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District



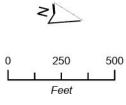


• WAITSBURG COPPEI • MINNICK 12 DIXIE . WALLA WALLA VICINITY MAP



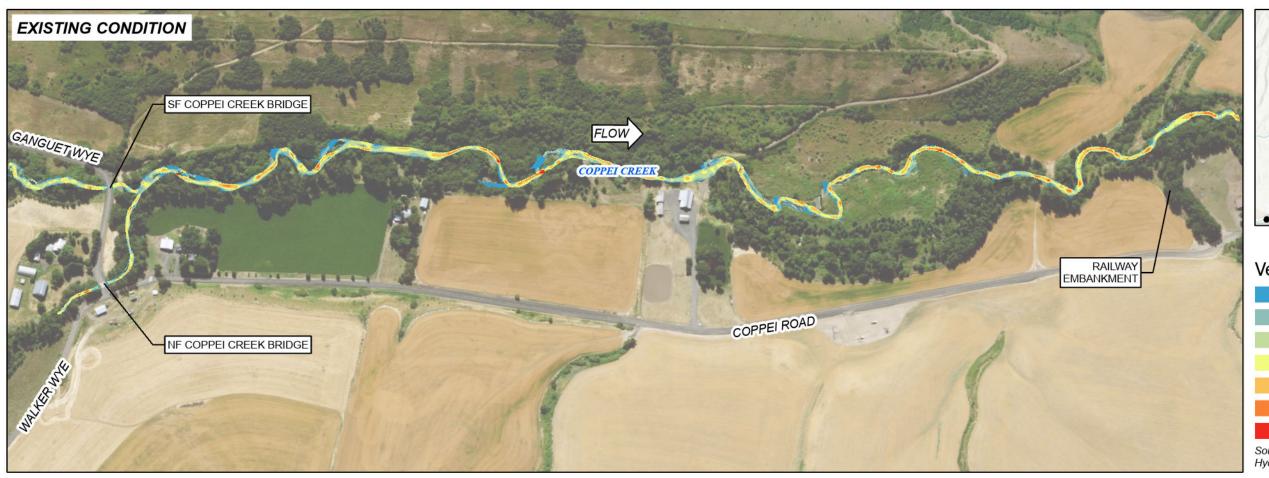
Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

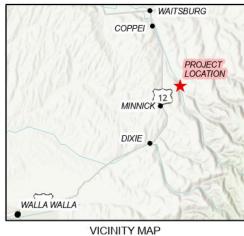
LiDAR supplemented with bathymetric survey data collected by Rio ASE in April 2021. 2 - Hydraulic modeling was performed using HEC-RAS version 6.3.1 (USACE) with twodimensional unsteady flow calculations.





Existing and Proposed Conditions Velocity at 8.7 cfs (50% Exceedance) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District



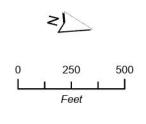




>6

Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

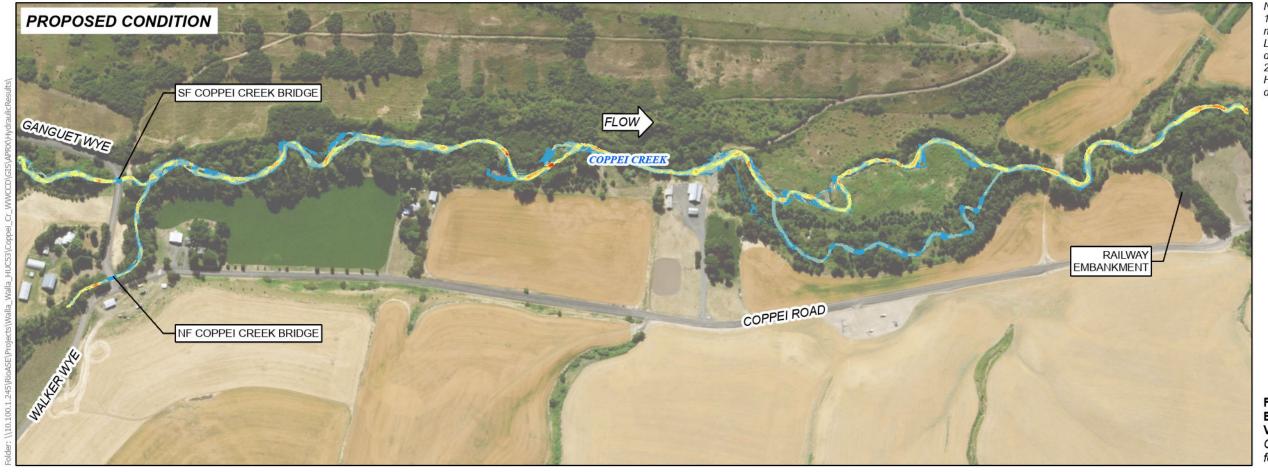
Notes: 1 - The terrain surface used in the hydraulic model was developed by Rio ASE using 2018 LiDAR supplemented with bathymetric survey data collected by Rio ASE in April 2021. 2 - Hydraulic modeling was performed using HEC-RAS version 6.3.1 (USACE) with twodimensional unsteady flow calculations.





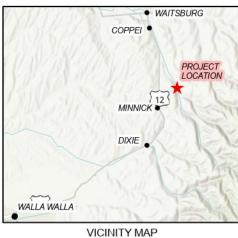
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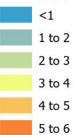
FIGURE 11 Existing and Proposed Conditions Velocity at 78.6 cfs (5% Exceedance) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District











Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

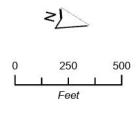
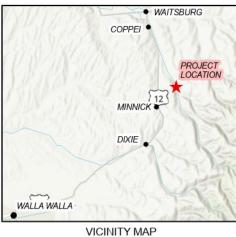




FIGURE 12 Existing and Proposed Conditions Velocity at 259 cfs (1.5-Year Recurrence) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District









5 to 6

Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

Notes: 1 - The terrain surface used in the hydraulic model was developed by Rio ASE using 2018 LiDAR supplemented with bathymetric survey data collected by Rio ASE in April 2021. 2 - Hydraulic modeling was performed using HEC-RAS version 6.3.1 (USACE) with twodimensional unsteady flow calculations.

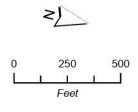
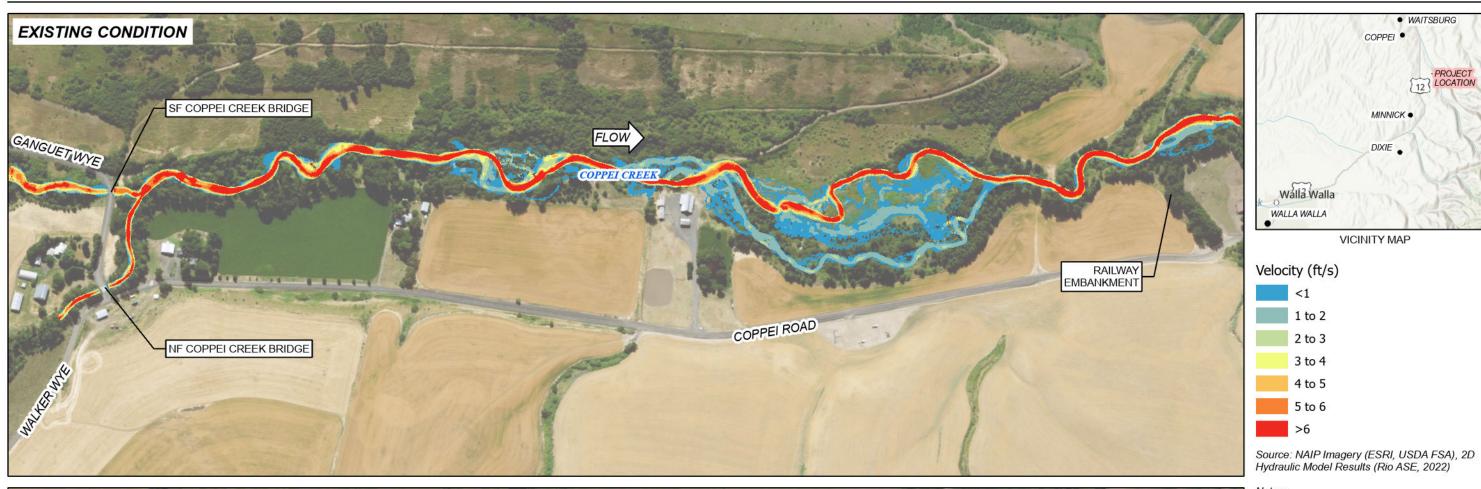




FIGURE 13

Existing and Proposed Conditions Velocity at 361 cfs (2-Year Recurrence) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District





<1 1 to 2

Notes: 1 - The terrain surface used in the hydraulic model was developed by Rio ASE using 2018 LiDAR supplemented with bathymetric survey data collected by Rio ASE in April 2021. 2 - Hydraulic modeling was performed using HEC-RAS version 6.3.1 (USACE) with twodimensional unsteady flow calculations.

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PROJECT LOCATION

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VICINITY MAP

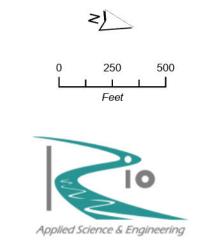
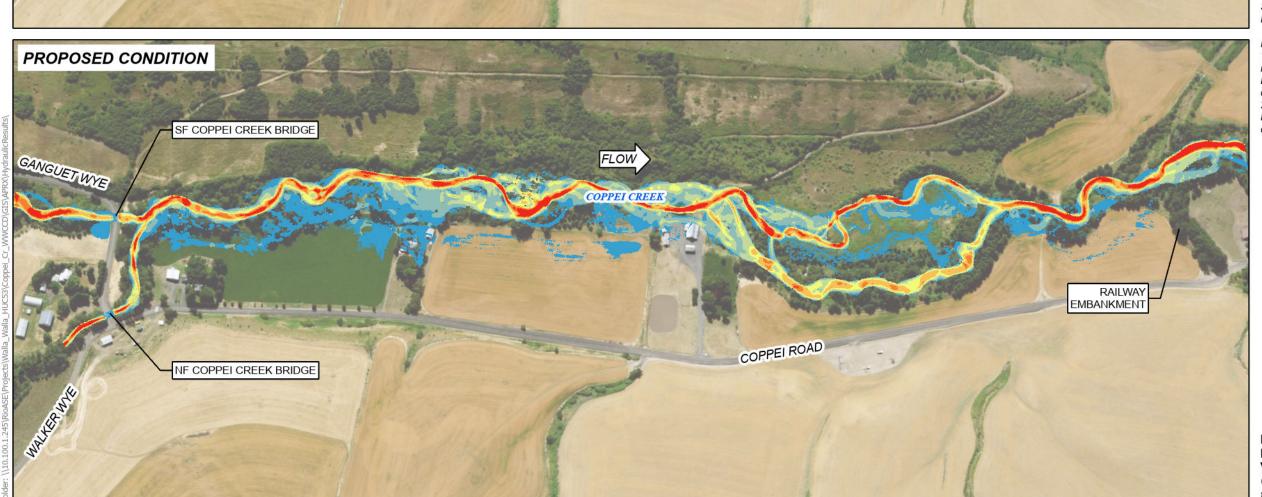
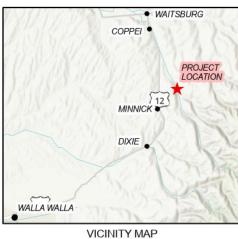


FIGURE 4 Existing and Proposed Conditions Velocity at 701 cfs (5-Year Recurrence) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District









4 to 5 5 to 6

Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

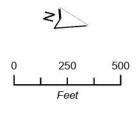
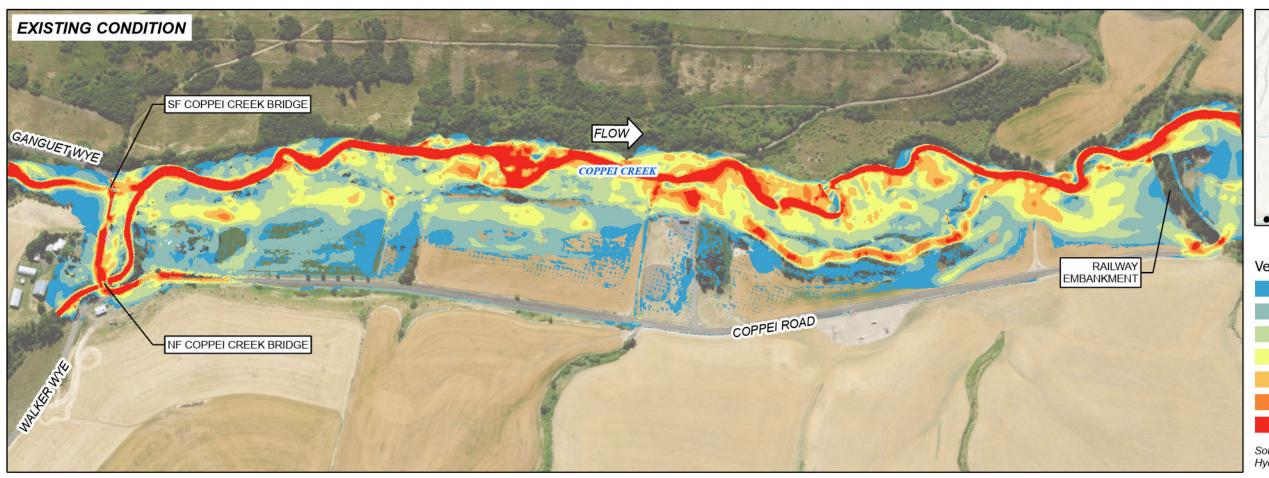
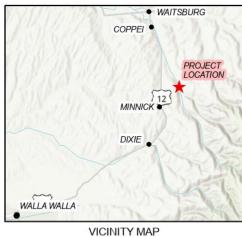




FIGURE 15 Existing and Proposed Conditions Velocity at 1002 cfs (10-Year Recurrence) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District

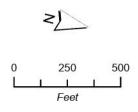






4 to 5 5 to 6

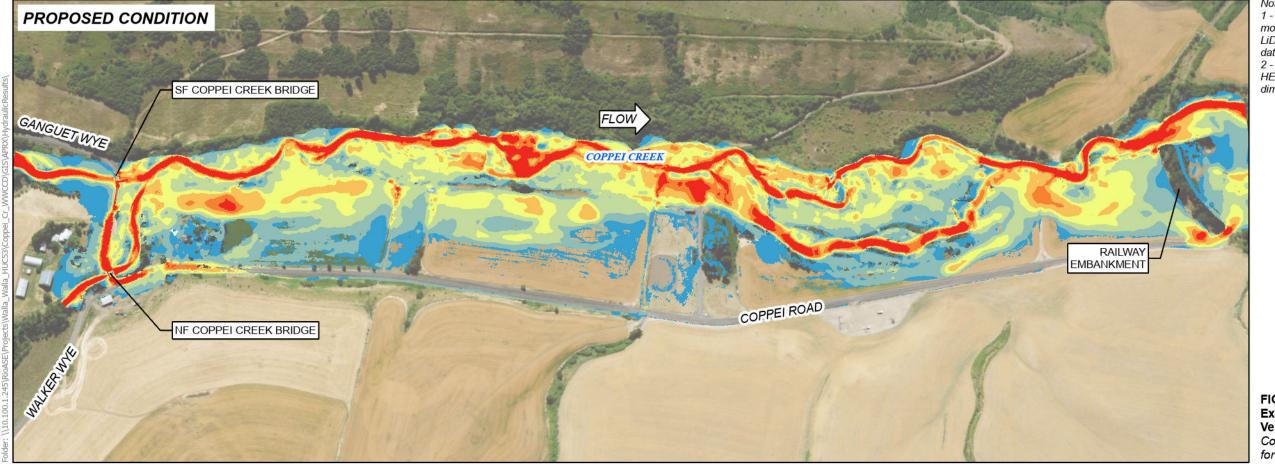
Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)





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FIGURE 16 Existing and Proposed Conditions Velocity at 2403 cfs (100-Year Recurrence) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District







Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

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VICINITY MAP

< 0.5 0.5 to 1

1 to 2

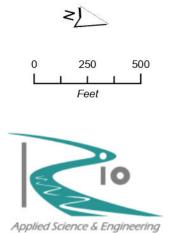
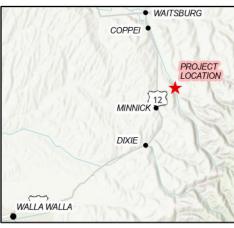


FIGURE 17 Existing and Proposed Conditions Shear at 2.1 cfs (95% Exceedance) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District







VICINITY MAP



Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

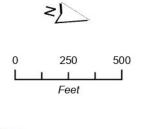




FIGURE 18 Existing and Proposed Conditions Shear at 8.7 cfs (50% Exceedance) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District





Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

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DIXIE .

VICINITY MAP

< 0.5 0.5 to 1

1 to 2

Notes:
1 - The terrain surface used in the hydraulic model was developed by Rio ASE using 2018 LiDAR supplemented with bathymetric survey data collected by Rio ASE in April 2021.
2 - Hydraulic modeling was performed using HEC-RAS version 6.3.1 (USACE) with two-dimensional unsteady flow calculations.

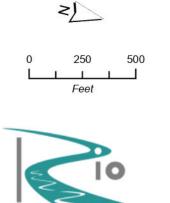
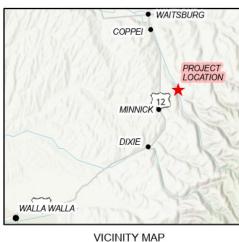


FIGURE 19 Existing and Proposed Conditions Shear at 78.6 cfs (5% Exceedance) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District

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Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

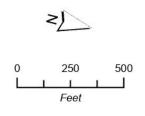
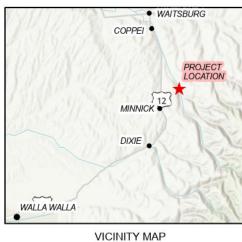




FIGURE 20 Existing and Proposed Conditions Shear at 259 cfs (1.5-Year Recurrence) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District









2 to 3

Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

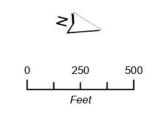
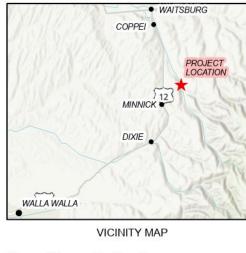




FIGURE 21 Existing and Proposed Conditions Shear at 361 cfs (2-Year Recurrence) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District









2 to 3

Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

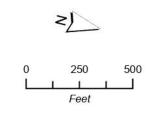
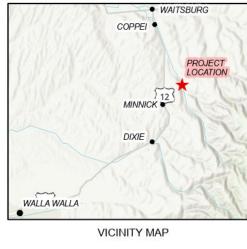




FIGURE 22 Existing and Proposed Conditions Shear at 701 cfs (5-Year Recurrence) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District









Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

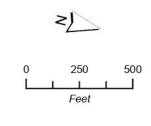


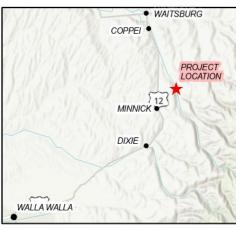


FIGURE 23 Existing and Proposed Conditions Shear at 1002 cfs (10-Year Recurrence) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District









VICINITY MAP

< 0.5 0.5 to 1 1 to 2 2 to 3

Source: NAIP Imagery (ESRI, USDA FSA), 2D Hydraulic Model Results (Rio ASE, 2022)

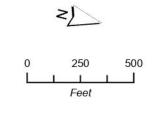




FIGURE 24 Existing and Proposed Conditions Shear at 2403 cfs (100-Year Recurrence) Coppei Creek Project Area 07 30% Design for Walla Walla County Conservation District